

# ABSTRACT

In order to compensate for performance degradation caused by inferior low-cost analog radio component tolerances of an analog radio, a future system architecture (FSA) wireless communication transceiver employs numerous digital signal processing (DSP) techniques to compensate for deficiencies of such analog components so that modern specifications may be relaxed. Automatic gain control (AGC) functions are provided in the digital domain, so as to provide enhanced phase and amplitude compensation, as well as many other radio frequency (RF) parameters.